

GEOLOGY

(Paper I)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

All questions carry equal marks.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Explain any three of the following in about 200 words each:
 - (a) Caldera and Stratovolcanoes
 - (b) Internal Constitution of the earth
 - (c) Lineaments with reference to India
 - (d) Major Geomorphic features of Indian subcontinent
2. Describe and discuss how folds and faults can be identified in the field. What is the relevance of these for the society?
3. Describe: (i) deep sea trenches, (ii) mid-ocean ridges and (iii) sea-floor spreading and discuss their significance.
4. Write brief notes on the following giving Indian examples wherever possible:
 - (a) Guyot
 - (b) Landforms of Glaciated mountains
 - (c) Significance of Linear and Planar structures
 - (d) River-piracy
 - (e) Barchans and Loess

SECTION 'B'

5. Answer any three of the following in about 200 words each:
 - (a) Present day horses are different from their geological ancestors. Comment.
 - (b) Evolutionary trends in Trilobites
 - (c) Boundary problems in Indian stratigraphy
 - (d) Correlation of Gondwanas of India with their world equivalents
6. Describe the morphology and classification of Ammonoids and give their distribution in space and time.
7. Briefly give the classification, conditions of deposition and fossil fauna of Siwalik system of India.
8. Write stratigraphic notes on any three of the following:

- (a)** Precambrian rocks of Karnataka (Modern views)
- (b)** Stratigraphy of oil-bearing formations of North-Eastern India
- (c)** Principles of stratigraphic classification
- (d)** Geological succession and fauna of the Cretaceous formations of Narmada Valley